

Ground Stabilisation CASE STUDY

## **Colchester CO3 ONN - Access Road**

Project	JJM2522 - New Access Road
Location	Colchester
Client	Bell House Landfill
Key works delivered	Ground Stabilisation
Project Duration	Nov 2020 - 1 day
Stabilised Area	1,000m <sup>2</sup>
Earthworks volume	By Client





#### **PROJECT OVERVIEW**

New Access Route to Land Fill Tip. All made Ground – No firm base. CBR<1.0% – Options available to Client for Construction

- 1. Import circa 7,000m3 of 6F material and compact.
- 2. Stabilise the New Access Road

#### **PROJECT CHALLENGES**

Our team were challenged by the poor CBRs and availability of good firm sub-base material to stabilise.

Access to the works area for the stabilising equipment running on very soft ground.



#### ENGINEERING AND SOLUTIONS TO OVERCOME THE CHALLENGES

In order to overcome the project challenges, set by the client, our team:

- Worked with the client and advised on the finding of the existing **Site Investigation Information** as to the best and quickest solution for a stabilised site.
- We carried out on site **CBR testing** to enable our Designers to generate a very efficient design solution for our client
- Our site team then set to work to improve the soil and dry out the site with lime and then created a 300mm thick layer of stabilised soil using cement to form a CBM layer



- The works had a two-fold advantage to this site. **JJMac Ground Stabilisation Dried** the site out, saving programme time.
- The 300mm cement layer (once capped with Type1) to create a very robust and efficient new Access Road to the Landfill.



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### **BENEFITS TO CLIENT**

Cost Saving	
	60%
Programme Reduction	
	75%
Vehicle Movements Reduction	
	80%
Imported Aggregate Reduction	
	85%
Material Sent To Landfill Reduced By	
	100%
Stone Layer Depth Reduction	
	70%